CASES ILLUSTRATING THE TREATMENT

OF

SUPPURATING OVARIAN CYSTS,

AND

)ME POINTS CONNECTED WITH OVARIOTOMY.

By THOMAS BRYANT.

ɜsE 1.—*Ovarian disease; suppuration of the cyst; free incision into the sac; convalescence.*

Esther B—, æt. 34, a married woman, the mother of eight ldren—three having been born during the last four years—s admitted into Guy's Hospital on September 1, 1864, under eare of Dr. Oldham and Mr. Bryant, having been sent in Dr. Hullett Browne, of Gordon Square. She had been subjeet of ovarian disease for four years, and the tumour inereased slowly but steadily; till quite reeently it had nsed her very little pain, exeept from its size.

For some months—about five—she had, however, suffered a od deal; there was eonstant pain of a dull eharaeter in the nour, and her general health had begun to fail. In Denber last the pain was at its elimax, and was attended with miting. Sinee then the tumour had elearly diminished in e.

On admission, the abdomen was filled with a large tumour out the size of a pregnant uterus at its full time; it was arly eystic, and apparently made up of many cavities. Any-

thing like pressure upon it caused pain, and even the gentlest manipulation distress. There was in it indistinct fluctuation.

The general appearance of the woman was very unsatisfactory. Her complexion was sallow and unhealthy; skin hot and at times bathed in perspiration; pulse 120, small, feeble, and rapid; tongue furred; appetite bad. Upon the whole, it appeared as if the tumour was undergoing some degenerative change. Consequently ovariotomy was postponed, although the woman had entered the hospital for the purpose of having it performed.

As months passed away these symptoms did not improve; but, on the contrary, they became more marked, and it was tolerably clear that the patient's powers were giving way. It was, therefore, determined to explore the tumour, and, if suppuration existed, to let out the pus. On February 18th the operation was performed by making an opening midway between the umbilicus and pubes. The incision was made carefully through each tissue, and when the cyst was reached it was punctured; some horribly fœtid pus escaped. The incision was then increased upwards and downwards, making altogether a wound about four inches long, and seven or eight pints of purulent fluid with broken-up tissue were let out. The cyst was washed out and the walls carefully stitched to the margin of the abdominal wound.

The patient experienced great relief from this operation, and all her constitutional symptoms rapidly improved.

The cyst was washed out daily.

By March 29 the cyst had greatly contracted. There was very little suppuration. The cavity would hold less than half a pint of water, and the injection came away clear. The abdomen was of nearly its natural size, a very small mass of solid tumour being perceptible. The patient's general health had greatly improved. She took her food well, and daily gained strength. She had very little abdominal pain.

On April 15 the second tumour, or rather mass, that was to be detected in the abdomen, suddenly lessened, and fœtid discharge again appeared from the wound; it was of the same nature as the previous discharge. The patient had been poorly for some days before, suffering from severe abdominal pain and some slight constitutional disturbance. The discharge came

in large quantities, and contained broken-up tissue. Indeed, it was tolerably clear that another portion of the tumour had softened down and suppurated, the abscess having burst into the parent cyst. In another ten days the constitutional disturbance caused by this fresh action had subsided, and on April 26 the patient was up and about the ward. The cyst during this time was daily washed out with a syringe, and good diet was given. From this time everything went on most favorably. What remained of the abdominal tumour was not larger than a fist; the opening into the cyst had so contracted as to be represented by a sinus, into which a small catheter could be passed. Very little discharge came from the cyst; what passed was watery and inoffensive. The general power of the patient also improved.

By August she was well enough to leave the hospital, wearing a belt; she had directions to wash out the cyst herself with a syringe, and to pass a catheter into the wound daily to prevent its closing.

On February 15, 1866, I saw this patient. Her general health was really good; she was able to do her ordinary domestic work without unusual fatigue, and experienced very little pain or inconvenience from her old complaint. The sinus was still open, and discharged at times, the wound having been kept open by the occasional passage of a small catheter. The cyst, or rather what remained of it, was represented by a mass about the size of a fist. There was no pain in the abdomen, or other symptom of disease.

This patient again presented herself in June, 1867, and was very much in the same condition as at the last report.

Remarks.—The case which has just been recorded demands attention, because it is a type of a class of cases which at times come under notice and which are too frequently left to themselves, from the feeling that any such operative measure as ovariotomy is out of the question, and with the hope that nature's own processes will find a way of giving relief. This way is, however, generally by the death of the patient. Occasionally the suppurating cyst may open into some cavity, such as the bladder or bowels, or into the vagina; occasionally it may open and discharge externally; but too frequently the

patient dies unrelieved, exhausted, recent peritonitis hastening the end.

The history of the case just related appears to point out a way by which relief may at times be given in such cases, if not a cure gained, and suggests some points of practice of no little importance.

First of all it clearly proves the great benefit that is to be conferred on a patient by laying open a large suppurating cavity, and establishing a free outlet for its contents, even when that cavity is in the abdomen, and of an ovarian nature; but it is to be remembered that a large opening was made in the case recorded, and that the cavity was kept clean by daily washing.

It can hardly be doubted that a small incision into or tapping of the cyst would not have been followed by a like successful result; for general surgical experience is certainly not favorable to such a line of practice, although it cannot be asserted that, at the present time, it is more so to the long incision, and free evacuation of the tumour's contents. For my own part, I believe that any large suppurating cavity, when it is to be opened at all, should be opened freely; and that so long as the cavity can be kept empty and well cleansed, a healthy reparative process will be carried on by nature's powers, and that a good chance of recovery will consequently be given. The washing out of large abscesses, the treatment of empyema by means of the drainage tube, and other like cases, all tend to support this view; and the case I have just given certainly adds a weighty argument to support the practice.

But is it always an easy matter to make out that an ovarian tumour is undergoing degenerative changes? And, unless such a diagnosis can be made, would a surgeon be justified in tampering with the cyst, or in tapping and exploring it? The answer I am disposed to give to such a question is somewhat favorable to the exploratory measure; for even assuming that it may be difficult to make out with certainty that a tumour is degenerating, there can be little doubt that a shrewd suspicion of such a change can generally be formed, and that, under such doubtful circumstances, an exploratory incision down to and into the growth is quite justifiable.

A carefully made incision of a limited nature—about an inch is amply sufficient—may surely be employed without great danger

under such desperate circumstances; for the chances of giving relief to a sinking patient are so great under these conditions that the extra risk, when uncertainty exists, seems to me fairly justifiable. Such an exploratory measure need not be much more than a tapping.

Another case in point may here be related which bears forcibly upon this subject. It made a great impression upon my mind in many ways when it occurred. It has been related in detail by Dr. James Williamson, of Mildmay Park, Islington, in the 'Lancet' of March 10, 1866. The points, as far as they bear on the present subject, are as follows:

CASE 2.—*Suppuration of an ovarian tumour; attempted ovariotomy; subsequent sloughing of the cyst, and recovery.*

Mrs. C—, æt. 35, the mother of three children, consulted me in April, 1864, on the recommendation of Dr. Williamson, for an ovarian tumour. The disease had existed for nearly three years and had been progressive. During this period pregnancy took place, but at the sixth month, or thereabouts, sickness set in so severely, and the swelling increased so much, that Dr. R. Lee, who was consulted, brought on premature labour on March 10th, 1864. On April 6th, the tension of the tumour being still great, tapping was performed by Dr. Williamson, and fourteen pints of a clear fluid were drawn off. The tumour was then made out to be multilocular. When the patient had recovered from this operation—Dr. Lee refusing to entertain the idea of ovariotomy—I was consulted. I saw this lady on several occasions. When I first visited her her abdomen was very large, and clearly contained a polycystic ovarian tumour. Her general condition, however, was not good. The question of ovariotomy was discussed, but postponed till the general health of the patient should have somewhat improved. Dr. Oldham was also consulted at this time and gave the same advice. This lady then went down to Brighton for one month and returned much improved, consequently the day for the operation was arranged—June 18th. However a day or two before this Mrs. C— complained of "something giving way in her stomach." This was followed by considerable abdominal pain, fever, sick-

ness, and general constitutional disturbance. The idea of operating was, therefore, at that time abandoned.

On June 30th I tapped the patient and drew off a few pints of a sero-purulent gelatinous fluid. The operation, however, afforded but little relief. For some weeks after this Mrs. C— continued to fluctuate, the pulse varying from 100 to 120, with occasional sickness as well as abdominal tenderness. Under these circumstances I regarded the extirpation of the growth as an impossibility; I believed that the peritonitis, which had clearly existed, had in all probability fixed the tumour firmly in its position, and that the general powers of the patient were too feeble to allow of such an attempt being made. In this view I was supported by Dr. Oldham, who saw the case alone with Dr. Williamson. The patient and her friends were, however, very anxious that the operation should be performed, and as I refused to do it at that time, a physician who performs ovariotomy was consulted. He examined her on July 23rd, and on the 25th tapped the cyst, drawing off five pints of a sero-purulent fluid, giving it as his opinion that it was a case holding out considerable prospect of success from operation. The cyst gradually filled again, but there was little improvement in the patient's strength, less than had been hoped for after the removal of the cyst's contents. The pulse now ranged from 80 to 100; there was, however, no sickness nor much tenderness of the abdomen.

Under these circumstances ovariotomy was performed or rather attempted, for the operator, on making his incision, found the cyst so completely adherent to the abdominal parietes that it was impossible to get behind it at any one point. The fluid portion was, therefore, drawn off, the septa broken down, and the wound closed. The rapid sinking of the patient was looked for. Happily, however, a different result ensued; considerable portions of the cyst subsequently sloughed out and were removed by the forceps from the wound, and a steady improvement followed. At the end of a month the wound had nearly healed, and she was conveyed to Hastings; for a few days she gained strength and flesh, but at the end of a week she became completely anasareous. After three weeks she returned home in that condition. At this time Dr. Williamson reported that the wound was open at its lower part, and that through it purulent

matter exuded. After some weeks of pain and constitutional disturbance the wound closed, but only for a time, for in January, 1865, the abdomen rapidly enlarged, and became painful and tender; the pulse rose to 130; the wound again opened at its upper part, and about five pints of a sero-purulent fluid discharged itself from the abdominal cavity. The discharge continued for some days with great relief. A second opening was formed at the lower part of the wound, and a profuse discharge took place from it. "Through both these apertures," writes Dr. Williamson, "each of which was about the size of half-a-crown, folds of intestine could be seen covered with adhesions, and a considerable quantity of matter was pressed up from amongst the intestines several times a day." This sloughing process continued for about three months. During this period the patient's stomach was so irritable that, for weeks together, her chief supports were enemata of beef-tea, &c.; she was unable to retain anything on the stomach but milk and lime-water in small quantities, and occasionally a little brandy-and-water. After this time, however, her recovery was steady and uninterrupted; by August 2nd, 1865, nearly one year after the operation, the wound had healed, and her general health was really good.

In August, 1868, this lady was still well.

The ultimate result of this case was doubtless due to the close attention and skill of Dr. Williamson, who attended her throughout.

Remarks.—A case such as the one I have just related contains many important lessons; the one I would more immediately select for my present purpose is well illustrated by the success of the case, and has reference to the benefit of a free incision into an inflamed and degenerating ovarian tumour.

I will pass over, with slight criticism, the attempt that was made to practise ovariotomy; I am at a loss to understand how any professional man could have brought himself to undertake such a proceeding, for it must have been clear to a surgeon that the removal of the growth was highly improbable, not to use a stronger word; and the general condition of the patient certainly forbade a strong hope being entertained that a good result could

ensue from any such operation. Still it was most fortunate that the attempt was made, for although it failed as an operation for extirpation of the growth, yet in the end it succeeded beyond all experience. It has proved that a suppurating abdominal cyst may be freely laid open with the greatest advantage, and that however low the patient may be in her general powers, there is still good ground for the expectation of a recovery when the degenerating and suppurating cyst has been emptied of its contents. Such a measure of success, I take it, was not expected by the operating physician in the case I have related; his boldness met with a better reward than could possibly have been anticipated. If such cases, however, are to be submitted to the operation of ovariotomy; if attempts to remove ovarian tumours under such conditions as existed in the patient to which allusion has been made are to be practised, any, nay, every case of ovarian disease, however hopeless, should be subjected to the same treatment; the principle of selecting cases should be abolished, and the practice of chancing a good result introduced, however scientifically slender that chance may be. I am no advocate for such a system; no words that I can use would be too strong to condemn such a practice, for it would make the practice of the profession, at least its surgical portion, unscientific and uncalculating, and render success a lottery.

In the present case, under the most unfavorable circumstances, the operation was attempted. It failed, and a bad result could only have been looked for; a marvellously good one—fortunately for the patient—was, however, eventually secured, and thus an unexpected lesson has been saved for us. It has certainly helped to convince me that much may yet be done for patients who are clearly sinking from the irritation of a suppurating and degenerating ovarian cyst, and tends strongly to support the practice illustrated in the former case of laying open the cyst, evacuating its contents, and washing out the cavity. This practice, however, has no more to do with ovariotomy than the free incision into a suppurating and disorganized joint has with amputation. The scientific objects the surgeon has in view in the two cases are widely different.

The laying open a suppurating ovarian cyst is one thing; the extirpation of the growth is another. Both operations are

sound in proper cases, but they are not to be confused, and the selection of the cases for either proceeding should be conducted upon the same safe and scientific principles which regulate all other surgical procedures.

ON SOME POINTS CONNECTED WITH THE TREATMENT OF THE PEDUNCLE IN OVARIOTOMY.

CASE.—*Ovariotomy; ligatures cut off close and returned with the peduncle into the abdominal cavity; their subsequent discharge through an artificial anus at the lower part of the abdominal wound; recovery.*

(Reported by Mr. J. W. MORISON.)

Emma S—, a single woman, æt. 36, was admitted into Guy's Hospital on September 4th, 1867, having been sent up to Mr. Bryant by Dr. Whitfield of Eastbourne.

She had always enjoyed good health, although her general appearance was somewhat pale. In May, 1866, she first observed an enlargement of her abdomen, this enlargement being apparently on the right side. Since that time the increase had been steady. There was occasional pain in the belly of a sharp character, but this never lasted for any time. The catamenia had been regular till five months before her admission, when they ceased.

On admission the abdomen was much distended and was clearly filled with fluid. It was uniformly dull on percussion when the patient was recumbent, except in the loins, where it was resonant. Fluctuation was also readily detected. The abdomen measured forty-two inches in circumference. The uterus was declared to be, on examination, normal and free. The cyst-wall was thought to be somewhat thin, and some ascitic fluid was believed to be present. Pulse 112 and weak; tongue clean; bowels regular. Her legs had swelled a little during the last few weeks.

On September 21st this patient was tapped to make the diagnosis sure, for it was uncertain how much of the fluid was ascitic. Nearly four gallons of a very light-coloured fluid, slightly sticky, containing cholesterine, were drawn off, a large

solid ovarian mass remaining. No bad symptom followed this operation, but by the 3rd of October the abdomen was nearly as large as ever.

On October 4th, therefore, ovariotomy was performed; Mr. Bryant, as usual, operated in a private ward with only such visitors present as were free from all dissecting-room-, post-mortem-room-, or other septic influences. He made an incision about six inches long below the umbilicus, tapped the abdomen, and evacuated some quarts of ascitic fluid; a semisolid ovarian cyst then came into view, which was also tapped, and two quarts of a white, highly gelatinous fluid were drawn off. The tumour, which proved to be connected with the left ovary, was then drawn out, and its peduncle secured in two portions with strong whipcord ligatures. The tumour was then separated from its peduncle about half an inch above the ligatures; these were cut off close, and the whole was dropped back into the abdominal cavity. The wound was closed with smooth silk sutures, an opium suppository was given, and the patient was placed in bed, water dressing being applied to the wound.

A little chloroform sickness followed the operation, but disappeared on the second day, and everything went on favorably.

The patient was allowed iced milk, of which she took freely.

On October 8th, or fourth day, the wound had healed. The sutures were consequently removed, some broad pieces of strapping being put on to keep the parts well together. There had not been any pain in the abdomen since the operation, nor any distension.

On October 11th, or seventh day, the strapping became loose, some ascitic fluid having made its way through an opening in the wound; it came with a rush during the night. This somewhat alarmed the patient, but on examination a very little gaping of the wound was found, and in all other respects the patient was comfortable. The bowels had been acting naturally during this period.

October 12th.—Last night some diarrhœa set in, several loose stools having been passed; it was checked, however, by a dose of chalk mixture. The patient subsequently seemed very comfortable; she was free from all pain and abdominal tenderness. Her pulse was good, tongue clean, aspect healthy; she took her food also with tolerable appetite.

October 15th.—Diarrhœa again set in, with some little abdominal tenderness at the lower part of the wound.

On October 17th a fluctuating swelling appeared at this part, this swelling being clearly tympanitic. The diarrhœa was again checked with a dose of chalk mixture, but the fluctuating swelling opened naturally on the 18th, and liquid fæces made their escape. No signs of other mischief existed. The nurse was directed to examine the fæces which passed from the artificial anus with great care, to see if any ligatures came away.

In four days, or by October 22nd, this aperture closed. Everything appeared to be going on well for one week, when diarrhœa again set in and the artificial anus again opened; fæces passed through the wound freely, and on October 29th the double loop of ligature by which the pedunele had been secured came away. In another three days the wound had again healed, and in three weeks the patient left the hospital perfectly well.

The looped ligatures as they came away, illustrating the value of crossing the ligatures before tying the two halves of the pedunele.

Remarks.—The main point of interest in the case just recorded is the discharge of the ligatures by which the pedunele had been secured through the artificial anus at the lower part of the wound; such a result is in my experience quite unique. Indeed, amongst twenty-four cases in which I have adopted the practice of dropping into the abdominal cavity the loops of the divided ligatures with the pedunele, this is the only one in which any untoward result has to be recorded which was clearly due to the practice itself. But in this instance there is hardly room for doubt that the ligatures by their irritation caused the diarrhœa, and that it was through an ulcerative process that they formed a communication with the intestine, and were discharged externally.

Such a case as the above clearly tells against the practice adopted, and although by itself it may not be sufficient to prove

the practice unsafe or inexpedient, it is enough to lead us to think that where a ligature can be left outside the abdomen without inconvenience, such a method had better be followed, and that although in certain cases the plan of dropping into the peritoneal cavity the end of the divided peduncle with the ligatures cut off close may be a good one, it is not free from its own special risks, and that we are still to look for some simpler or better plan by which the peduncle may be treated.

What that plan may be it is at present impossible to decide, but any method that leaves a foreign body within the abdomen is far from perfect. In one case which has been under my care within the last year, some half dozen ligatures had to be employed and were left in, and although for a time everything seemed to be going on well, a fatal result ultimately ensued, when the ligatures were found in the abdominal cavity resting in their own depôts of pus, having been thrown off from their attachments, and acting as foreign bodies. In two other cases which terminated favorably the silk ligatures by which omental adhesions had been secured were also discharged externally through the wound.

On the other hand I could quote two cases which went on without one bad symptom, in which four and six ligatures respectively had been employed without the slightest evil, the patients leaving the hospital well after an uncomplicated and steady convalescence; and many others could also be given in which the peduncle alone had to be secured and in which good results ensued.

I am free, however, to confess that the cases above mentioned have made me somewhat dissatisfied with the plan of treatment to which the peduncle had been subjected, although for short peduncles and broad attachments I at present know of no other which can be preferred; to the long and narrow peduncle the clamp may be as applicable, to say the least of it, and perhaps more so; still in other cases this plan of treatment by the clamp is far from satisfactory. Where the peduncle is short or broad it is certainly objectionable; for by the clamp fixed externally there is invariably traction upon the uterus and its ligaments, and this traction is the source of great irritation and consequently of danger.

I had hoped that in the actual cautery we should have found

the right means of treating the pedunele as well as omental and other adhesions. In fact some evidence has been given favorable to the use of the actual cautery in these cases; but I regret to say that in my hands it has certainly failed. In the case of a girl aged twenty-two, whom I operated upon on November 20th, 1868, I burnt down the pedunele with the galvanic cautery with the greatest facility, and also one large omental adhesion, but hæmorrhage took place in the latter from a large vessel, the size of the ulnar artery, as well as from another point. I consequently ligatured the whole.

I must admit also that from the appearance of the carbonised surface I should not have returned it into the abdominal cavity without some misgiving, and I cannot help thinking that it must be as much a foreign body as a thin whipcord ligature. Still, from one case it is hardly fair to draw any conclusions, for if the pedunele had been the only part which required division, I should certainly have dropped it back tolerably satisfied with the effect of the cautery, and good success might have followed. It was perhaps unfortunate that in the omentum so large an artery as I have described should have existed, for it is unusual.

There is another lesson to be learnt from this case which must not be omitted, and it refers to the application of the ligature to the pedunele. That the pedunele should be tied in halves is a point which is generally recognised and needs no comment; but that the ligatures should be crossed as illustrated in the woodcut on p. 12 is perhaps not sufficiently followed in practice. By doing so the chance of tearing the two halves of the pedunele asunder, and the danger of lacerating important parts are done away with. Again, should the ligatures set up ulceration in the part, they will both come away together, as in the case I have related.

It is well also to perforate the pedunele with a blunt-pointed probe, for a sharp needle may puncture a vein or other vessel, and thus cause a troublesome hæmorrhage; in a case I had some years since such a result took place, and taught me the lesson I now repeat for the benefit of others. In ovariotomy success seems to turn much upon what appear to be small points, but as a life is often involved in their consideration, too much attention cannot be given to any that are of value.

The one I have mentioned must consequently be regarded as an important one.

ON MENSTRUATION FROM THE PEDUNCLE OF AN OVARIAN TUMOUR.

CASE.—*Ovariotomy; peduncle fixed by a clamp externally; recovery; discharge of blood from the end of the peduncle in the cicatrix during the menstrual flow subsequently.*

This case has already been published in detail in my work on ovariotomy (*vide* Case 11). The patient, æt. 34, was operated upon on April 26, 1864, and made a rapid recovery, the peduncle of the tumour having been kept outside the abdomen with a clamp. In August of that year the catamenia appeared, and during this period there was a discharge of blood from the stump of the peduncle in the wound for two days; the same discharge took place for four consecutive periods, when it ceased for two months, the catamenia still showing themselves with regularity. At the end of this time, however, the peduncle again began to ooze blood during the menstrual flow, and from that date, June, 1865, up to the present October, 1868, the discharge has been constant at those periods.

In another case also (Case 12)—that of a patient æt. 33—the same discharge of blood took place for six months during the menstrual flow after the operation; after which it ceased, and when I heard of the patient some months subsequently, no return had taken place.

Remarks.—This question of menstruating from the pedunele of an ovarian tumour is one of great interest, and I know of no facts bearing upon the subject which have been published. The cases I have mentioned cannot be rare, and I trust other operators will give us their experience upon the point. The discharge is continually a source of annoyance to a patient under such circumstances, but it can hardly be brought forward as an argument of any weight against the practice of treating the peduncle by the clamp.

But out of this another question naturally arises: If the pedunele of an ovarian tumour discharges blood during the

menstrual flow when it is found externally, may it not do the same thing when it is dropped into the pelvis? I can hardly think that a peduncle fixed outside the abdomen would act differently to another which has been dropped in, and yet the evidence I possess so far seems to show that the former may discharge blood at the menstrual period, and that in the case of the latter there is no evidence to indicate such an action. I know of no instance in which a pelvic hæmatocele has formed after the operation.

The fact by itself, however, is worthy of a record and of further observation.